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#### ABSTRACT

As part of a larger effort to understand how classrooms are managed, this study used narrative descriptions of class sessions conducted by seven junior high school English teachers to map the way order was achieved under different circumstances. The basic unit for analysis was the classroom activity, characterized by an identifiable focus or a definite time allotment and program of action. Preliminary analysis of the data revealed five major themes: the effect of the junior high school class schedule on activity systems, the nature of activities and their contexts, activity boundaries and distinctiveness, processes of getting activities started, and activity management and curriculum. Results of the analysis indicated that successful managers were able to (1) construct lessons that fit the externally paced schedule of the school day; (2) use activities with a clear program of action; (3) explicitly mark the boundaries of activities and the transition between activities; (4) demonstrate situational awareness by attending to details and commenting on events taking place in the room; ((5) protect activities until they were established by ushering them along, focusing public attention on work, and ignoring misbehavior that disrupted the rhythm and flow of events; and (6) push students through the curriculum even when misbehavior was prevalent in the class. (Author/HOD)

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Managing Classroom Activities in Junior High

English Classes: An Interim Report

Walter Doyle

Research and Development Center for Teacher Education

The University of Texas at Austin

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# Managing Classroom Activities in Junior High English Classes: An Interim Report

Walter Doyle

Abstract

For this interim report, narrative descriptions of class sessions conducted by seven junior high school English teachers were used to map the way activities were managed under different circumstances. Five major themes emerged from this preliminary analysis: (1) the effect of the junior high school class schedule on activity systems; (2) the nature of activities and their contexts; (3) activity boundaries and distinctiveness; (4) processes of getting activities started; and (5) activity management and curriculum. Results of the analysis indicate that successful managers were able to: (1) construct lessons that fit the externally-paced schedule of the school day; (2) use activities that had a clear program of action for participants; (3) explicitly mark the boundaries of activities and the transitions between activities; (4) demonstrate situational awareness by attending to details and commenting on events taking place in the room; (5) protect activities until they are established by actively ushering them along, focusing public attention on work, and ignoring misbehavior that disrupted the rhythm and flow of events; and (6) push students through the curriculum even when misbehavior was prevalent in the class.

This interim report contains a summary of the current status of the analysis of activities in junior high school English classes and an indication of the nature of the propositions that are being generated by this project.

The analysis presented in this report was organized around the issue of how experienced teachers solved the problem of achieving and sustaining order. Doyle (1979, 1980) has argued that: (a) solving the problem of order is a central element in the task of teaching in class-rooms; and (b) order in classrooms rests primarily on the system of activities (i.e., arrangements of people and space) a teacher is able to establish and operate. In this view, successful teaching is grounded in the management of classroom activities.

For this study, which is part of a larger effort to understand how classrooms are managed (Doyle, 1982), narrative descriptions of class sessions conducted by seven junior high school English teachers were used to map the way order was achieved under different circumstances. The basic unit for the analysis was the activity which can be defined as a bounded segment of classroom time characterized by an identifiable (a) focal content or concern and (b) pattern or program of action (Gump, 1969; Ross, in press; Yinger, 1980). Classroom activities are commonly labeled by seating arrangements (e.g., seatwork, small group discussions, whole-class presentations, etc.) or by content (e.g., art, spelling, vocabulary, terms which are often associated with particular arrangements of students). Other key dimensions of an activity are duration, the physical space in which working occurs, the type and number of students, the props and resources used, and the expected behavior of students and the teacher. Activities, in other words,

represent the various ways in which groups are structured, information is communicated, and resources are used in classrooms. The identification and analysis of these segements of classroom time "makes it possible to describe classrooms in a manner that respects their, structure and internal differentiation" (Ross, in press). Such units are also likely to have meaning to the participants in classroom life (Burnett, 1973; Erickson & Shultz, 1981).

Previous reseach that has used the concept of activity has shown the following:

- 1. Teacher cognition is organized around the task of managing activities (Clark & Yinger, 1979; Doyle, 1979; Shavelson & Stern, 1981). The activity, in other words, is the fundamental unit of teacher thinking. An analysis of what teachers know about activities and how this knowledge is organized for use--what Shavelson and Stern (1981, p. 481) have called the "scripts teachers have for planning activities"--is likely to provide a reasonably complete picture of teachers' classroom knowledge.
- 2. Types of activities are significantly related to the behavior of teachers and students, in particular the level of student involvement in work (see Ross, in press, for a review). In addition, involvement, especially for low achievers, is typically higher in whole-class presentations or recitations than in seatwork. Involvement is also high when an activity is externally paced, teacher directed, and uses a simple signal system for information. Because of their relation to involvement, the study of activities is likely to provide information on how to achieve conditions of effectiveness in classrooms.

3. Only a few types of activities—primarily seatwork and recitation in elementary classes—account for a large portion of classroom time (Ross, in press). There are, however, distinct differences in the quality of these activities depending on the skill of the teacher and the ability levels of the students (Evertson, 1982; Sanford & Evertson, 1981). These findings suggest that a qualitative, rather than simply a quantitative, analysis is necessary to understand classroom activities and their management.

Studies of effectiveness in classroom management (see Emmer & Evertson, 1980, for a review) have underscored the importance of an efficient activity system in establishing and maintaining order in classrooms. This research has also shown that effective managers spend time directly teaching students the procedures and moutines associated with different activities. Most of this work has focused, however, on what characterizes an effectively managed class rather than on how teachers achieve and maintain these conditions of effectiveness over long periods of time in classrooms. The present study is a preliminary effort to extend our practical knowledge of management effectiveness, by mapping the practical requirements of managing activities on a continuing basis. By tracing how a number of teachers in a variety of classes establish and maintain activities, it should be possible to formulate propositions about the likely configuration of events in classrooms and thus to specify more fully what a teacher needs to know in order to achieve and sustain order in classroom environments. Procedural information of this type would seem to be an essential ingredient in the knowledge base for classroom practice and a fundamental component of the content of teacher education (see Doyle, 1981).

### Sample and Data

Data on seven junior high school English teachers were selected from the a sample of 25 English teachers who participated in the Junior High Classroom Organization Study (JHCOS) conducted previously at the R&D Center for Teacher Education (see Evertson, Emmer, & Clements, 1980). The data on each teacher consisted of approximately 14 detailed narrative observations in each of two class periods. Observers were instructed to focus on classroom rules and procedures and how activities were conducted. Observations were made throughout the year with a concentration on the first 3 weeks of school. For the most part, the narratives are reasonably complete representations of the behavior stream (Barker, 1968; Gump, 1967) that contain: (a) "scene coordinates" (Burnett, 1973, p. 293), i.e., descriptions of participants, physical arrangements, objects and props, and time; and (b) running accounts of action within these scenes.

In addition to the narrative records, teachers were rated on a variety of management scales (covering such items as success of students task orientation of the class, and amounts of disruptive and inappropriate behavior), and students engagement and achievement were measured. These quantitative indicators were useful in selecting cases from the corpus of narratives for analysis and for initial comparisons of clases. In addition, it was possible to estimate the relative effectiveness of teachers in the analysis.

For purposes of analysis, teachers were grouped into pairs who differed on indicators of management success but who worked with similar populations of students. The rationale for this pairing is as follows.

In essence the narratives contain descriptions of teachers going about the process of solving, with varying degrees of success, the problem of achieving order in classrooms. A central problem of analyzing these narratives is that the events being described are actually a product of an interaction between the demands of the classroom environment and the skills of a particular teacher in meeting these demands. Thus, descriptions of the task environment and descriptions of how the task was accomplished are intertwined.

The use of planned comparisons was seen as a way of partially untangling task and performance dimensions. By selecting contrasting cases of teachers who differed on indicators of management success but who worked with similar populations of students, it was possible to "control" to some degree for dimensions of the task environment while performance was allowed to vary. In addition, by using both "successful" and "unsuccessful" teachers, it was possible to study management "mistakes" which often reveal the structure of the environmental demands more clearly while, at the same time, having a picture of what a smotth performance might be. Mistakes are also useful because they often occasion a need for a teacher to attempt to "repair" the situation. Attempts to repair are frequently rich with information about how teachers think about classrooms.

The indicators of management success used in forming pairs were four scales from the component ratings (viz., student success, amount of inappropriate behavior, amount of disruptive behavior, and task-oriented climate) and ranks on academic gain. The primary population characteristic was the class mean on entering academic ability, with some attempt to have different ability levels represented among the teacher pairs.

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Data on the pairs included in the present analysis are given in Tables 1 and 2. (These figures are derived from the quantitative indicators used in the original JHCOS study, and the tables include information about the total sample of English classes selected for an analysis of activities.)

The first pair-Teachers 14 and 25-can be described as follows:
Teacher 14:

Period 1 - This was an average-ability 7th grade class with a pretest achievement rank of 17 and a posttest rank of 16 for the sample of 34 classes. The pre-achievement and post-achievement means were approximately equal to the mean for the sample. The residual gain score for the class was 20 out of 34. The class was characterized by relatively high amounts of whole-class instruction compared to seatwork, low task orientation and success, and a moderate level of inappropriate behavior. Ratings across the year show a decrease in task orientation and an increase in inappropriate behavior.

Period 2 - This was an average-ability 7th grade class with a pretest achievement rank of 13 and a posttest rank of 18 for the sample of 34 classes. The pre-achievement mean was slightly above the mean for the sample and post-achievement was approximately equal to the sample mean. The residual gain score ranked 24 out of 34. The class was

characterized by relatively high amounts of whole-class instruction compared to seatwork, low task orientation and success, and relatively high amounts of inappropriate behavior. Inappropriate behavior remained stable throughout the year.

Teacher 14 had 11 years of experience and received an overall rating on management success of 1 on a 5-point scale (1 was lowest and 5 was highest).

### Teacher 25:

Period 2 = This was a low-ability 7th grade class with the lowest pre- and post-achievement means in the sample. The residual gain score ranked 13 out of 34. The class was characterized by relatively high amounts of seatwork versus whole-class instruction, average success, moderate task orientation, and an average level of inappropriate behavior. Task oriented behavior decreased and inappropriate increased across the year. There was a significant negative correlation between entering and residual gain, indicating that lower-ability students did better in this class relatively to higher ability students.

Period 5 - This was an average-ability 7th grade class with a pretest achievement rank of 22 and a post ranks of 23. Both pre- and post-achievement means were below the mean for the sample. Residual gain ranked 26 of 34. The class was characterized by

whole-class instruction, moderate success and task orientation, and an average level of inappropriate behavior.

The teacher had 8 years of experience and received an overall observer rating of management success of 5 (on a 5-point scale).

The second pair for this study was Teachers 22 and 27, who can be depicted from the original quantitative indicators as follows:

Teacher 22:

This was an average-ability 8th grade class with a pretest and posttest achievement rank of 19.

Pre-achievement mean was nearly equal to the mean for the sample and post-achievement mean was below the mean. Residual gain ranked 28 of 34.

The class was characterized by relatively high amounts of seatwork versus whole-class instruction, moderate success and task orientation, moderate inappropriate behavior, and high disruptive behavior. Ratings for this class improved across the year, especially in the disruptive behavior category.

Period 6 - This was an average-ability 8th grade class with a pretest achievement, rank of 15 and a posttest rank of 17. Pre-achievement and post-achievement means were slightly above the mean for the sample. Residual gain ranked 23 or 34. The

class was characterized by relatively high amounts of seatwork versus whole-class presentations, moderate success and task orientation, and moderate levels of inappropriate and disruptive behaviors. Success increased while inappropriate and disruptive decreased across the year.

The teacher had 20 years of experience and received an overall observer rating of 3 on a 5-point scale.

## Teacher 27:

Period 1 - This was a high ability 8th grade class with a prestest achievement rank of 2 and a posttest rank of 3. Entering and post-achievement means were more than one standard deviation above the mean of the sample. Residual gain ranked 2 of 34. The class was characterized by nearly equal amounts of seatwork and whole-class instruction, high success and task orientation, and low levels of disruptive and inappropriate behavior.

Success and task orientation increased during the year.

Period 4 - This was an above average ability 8th grade class with an entering achievement rank of 8 and a post-achievement rank of 7. Entering achievement and post-achievement were nearly one standard deviation above the mean of the sample. Residual gain ranked 19 of 34. The class was characterized by nearly equal amounts of seatwork and



whole-class instruction, high success and task orientation, and low disruptive and inappropriate behavior. There was a significant negative correlation between entering and residual gain suggesting that lower ability students did better in this class relatively to high ability students.

The teacher had 2+ years of experience and received an overall observer rating of 5 on a 5-point scale.

The final pair was unique in that it involved classes of three teachers: Two classes of Teacher 42 compared to a low-ability class of Teacher 2 and a high ability class of Teacher 3. This particular pairing was done to achieve appropriate ability-level comparison groups for Teacher 42. Teacher 42 is unique, also, in that the teacher received high residual gains in both classes but a low overall observer rating. The classes in this pair can be described as follows:

Teacher 42:

Period 2 - This was a high-ability 7th grade class with the highest residual gain score in the sample. The entering achievement level was approximately one standard deviation above the mean for the sample and ranked fourth. Post-achievement was greater than one standard deviation above the mean and ranked second. The class was characterized by relatively high amounts of whole-class instruction, moderate success and task orientation, and moderate levels of inappropriate and disruptive

behavior. There was a significant negative correlation between entering achievement and . residual gain suggesting that lower ability students did better than higher ability students.

Period 4 - This was a low-ability 7th grade class with a pretest achievement mean ranked at 33 of 34 and a posttest mean ranked at 25. The entering achievement and post-achievement were more than one standard deviation below the mean of the sample. The residual gain score ranked fifth of 34, the highest residual for a low-ability class in the sample. The class was characterized by relatively low amounts of whole-class instruction, low success and task orientation, and high amounts of disruptive and inappropriate behavior.

The teacher had 8 years of experience and received an overall observer rating of management success of 2 on a 5-point scale;

#### Teacher 3:

Period 5 - This was a high-ability 8th grade class with a pretest achievement mean rank of 3 and a posttest achievement rank of 9. The entering achievement level was more than one standard deviation above the mean and the posttest mean was above the mean. The residual gain scored ranked 15 of 34.

The class was characterized by nearly equal amounts of seatwork and whole-class instruction, high success and task orientation, low disruptive, and moderate levels of inappropriate behavior. There was a significant negative correlation between entering achievement and residual gain, suggesting that lower ability students did better than higher ability students in this class. The teacher had 7 years of experience and received an overall observer rating of 5 on a 5-point scale.

#### · Teacher 2:

Period 4 - This was a low-ability 7th grade class with a pretest and posttest achievement rank of 30. Both pre- and post-achievement means were more than one standard deviation below the mean for the sample. The residual gain score ranked 17th out of 34. The class was characterized by slightly less whole-class instruction than seatwork, moderate amounts of success and task orientation, low disruptive, and moderate levels of inappropriate behavior. The teacher had 8 years of experience and received an overall observer rating of 5 on a 5-point scale.

# Procedures for Analyzing Narratives

The central problem of this analysis was to move systematically from the concrete and particularistic details contained in the narrative records to more general propositions about how teachers manage classroom activities. In traveling this distance, it was also necessary to preserve the dynamic quality of classroom processes, to keep the action moving as increasingly more abstract propositions were formulated. These problems were addressed by (a) designing a sequence of three stages—activity description, activity analysis, and comparative analysis—each of which involved transforming the record into a more general description of classroom processes; and by (b) maintaining a focus throughout the analysis on the arrangement of events in time (see Burnett, 1973; Erickson & Shultz, 1981).

The first two levels of the analysis were carried out with a single teacher across all observations, describing first the configuration of events in each class meeting and then the overall configuration for the year. At Level 3, teachers were first compared within pairs and then across pairs to generate more general propositions about the likely configuration of events associated with different solutions to the problem of maintaining order in classroom environments. The analysis at this third level was designed to generate models of the task environment and the consequences of different "solution strategies" used in this environment.

It is important to emphasize that, although these levels of analysis are distinct, they are not totally separate. The analysis at the first levels was done with an eye toward the requirements of the analysis at the higher levels.

Level 1: Activity description. The first level of description involved transforming the narrative records into activity descriptions.

Five steps were followed in writing an activity analysis for a single meeting:

- 1. Read through the entire narrative.
- 2. Go back through the narrative to divide the meeting into , natural segments and then calculate the number of minutes spent in each segment.
- 3. Go through each segment and write a description of (a) what the teacher and students generally did to carry out the segment and (b) any major management incidents (e.g., disruptions) that occurred during the segment. Conclude the description by devising a descriptive label for this segment.
  - 4. Describe all transitions between segments.
- 5. Record any comments about major themes or patterns which seemed to be emerging from the descriptions.

Although these steps appear relatively simple on the surface, they involved several complex analytical processes. The goal of an activity description is not simply to shorten a narrative. Rather, the purpose is to transform the behavior stream depicted in the narrative record into the basic analytical unit for the analysis, namely, the activity. In Burnett's (1973) terms, "The conceptualization of activities is another reconstruction of descriptive data several logical steps removed and, therefore, at a further level of abstraction from the coordinates of the scene and the stream of action" (p. 294). This was a fundamental step in the analysis since "the concept of activity bridges the level of description involved in microevents with the level of symbolic meaning and manifest function of the culture in which the events take place" (Burnett, 1973, p. 294).

To identify activities in a behavior stream, four factors or dimensions were considered:

- 1. Differences in the patterns for arranging students, such as large group presentations of information versus independent seatwork;
- 2. Differences in props and resources used, such as books versus films or teacher lecture;
- 3. Differences in roles and responsibilities for carrying out immediate actions and events, such as a shift from answering public questions orally to writing answers to workbook exercises;
- 4. Differences in "rules of appropriateness" (Erickson & Shultz, 1981, p. 156) i.e., differences in the kinds of behavior which are allowed and disapproved, as in the differences between behaviors during snack time and those during silent reading.

A change in one or more of these dimensions was used to signal a possible change in the place in which students and the teacher worked, i.e., a change in activities. At this stage, brief descriptive labels were given to segments and this information was recorded in a general overview section which contained a statement of the number of segments and the number of minutes devoted to each segment. For example:

This class session consisted of four segments:

- 1. Introduction to spelling lesson (7 minutes)
- 2. Study period for spelling pretest (6 minutes)
- 3. Spelling pretest (9 minutes)
- 4. Seatwork on spelling (25 minutes)

Once the behavior stream was segmented, it was then necessary to describe the segments. Descriptions of segments contained at least the following information:

- 1. A general characterization of the activity, focusing on the arrangement of students, the props and resources used, and the content;
- 2. What the participants did, with special attention to what actions the teacher used to introduce and keep a segment going and how successful these actions were in management terms, i.e., work involvement and disruptiveness;
- 3. Any actions by a student or several students which seemed to contribute to the ease or difficulty of keeping the activity running;
- 4. The extent to which the total class was incorporated into or excluded from the core actions necessary to carry out the activity (e.g., a discussion with four students in the class participating versus a recitation in which all students were required to respond).

  Throughout this description of individual segments, the arrangement of events in time was preserved. Attention was also given to points of "trouble" because such occasions are often useful in revealing information about the nature of tasks and how they are accomplished.

Once a segment had been described, a short descriptive title was devised, e.g., "Lecture with textbook as a prop and inserted teacher questions." This labeling of a segment was intentionally delayed until a description had been written to prevent premature closure and to avoid letting labels carry the burden of description. In addition, an attempt was made to devise labels that were "delimited and defined according to contrasts inherent in the data themselves and not according to a priori notions of pertinent descriptive categories" (Frake, 1980, p. 19). The purpose was to capture in brief the essential features of a segment to facilitate locating segments for comparison at other levels of analysis. But the emphasis remained on the qualitative features of segments. The

general forms activities can take in classrooms are probably limited to a few types, such as whole-class presentations, seatwork, recitation, small group work, and discussion. Yet, there are likely to be qualitative differences within general forms, and these differences are probably associated with maintaining order in classes.

The identification of segments in a behavior stream also involved the locating of transitions, i.e., the junctures between segments of working. Transitions vary in character and duration depending upon a number of factors, such as the types of activities between which the transition fits. Indeed, it is often difficult to locate precise beginning and ending points for transitions (Arlin, 1979). Part of this "boundary indeterminacy" results from the redundancy of cues which signal to members of a group that "something new is happening" (Erickson & Shultz, 1981, p. 150). Thus, at the end of segments there are several indications that the event is coming to a close and a new place for working will be constituted shortly. In addition, teachers vary in the extent to which they clearly demarcate segment boundaries.

In this analysis, "transition" was a mandatory category between activities even though a change may have taken a very short period of time, as in the typical case of transitions from whole-class presentations of instructions for seatwork to seatwork itself. Each transition was then described so that this information could later be related to different types of activity segments.

There were two other mandatory categories in activity descriptions:
namely, "opening" and "closing." These categories refer, respectively,
to how the class session was started and how it was brought to an end.
The opening section covers the period of time from when the students

began to enter the room to the start of the first academic work. In many cases, opening time was used to present information about procedures or to announce special events. Sometimes teachers used this time to make general comments about deportment or the quality of work. The closing contained a description of how the class ended, covering the period from when the last activity was brought to a close to the time students left the room. (The closing category was not used if the observation ended before the class session officially closed. In such cases, the absence of the closing category was simply noted.) Because openings and closings are transitional in nature, the mandatory transition category was not used between these segments and the activity segments which made up the class session.

Finally, an activity description was concluded with a section devoted to comments. This section contained two general types of information: (a) a description of the context of the class session, focusing on such matters as the time of the day, the day of the week, and any school events (such as football games or assemblies) that may have influenced the actions during the session; and (b) a description of any major themes or patterns that seemed to be developing in the session or across sessions. These comments were especially useful in the analysis at the next level in which propositions about sessions across the year were formulated.

In summary, a completed activity description contained five components: (a) a general overview of the session; (b) a description of the opening of the session; (c) one or more segment descriptions with the mandatory transitions between segments; (d) a description of the way the session was closed; and (e) comments.

Level 2: Activity analysis Once all class sessions for a single teacher were analyzed, a general description of how management was accomplished in the class across the year was written. For the junior high cases in this study, two classes of the same teacher were observed. The analysis was therefore conducted across all sessions for a single class. This analysis provided a history of a particular classroom group for the school year. The basic analytical unit was still the activity, but the focus shifted to questions of how the segments were managed over longer periods of time and how one meeting influenced and was influenced by other meetings. The purpose of this level of analysis was to transform the activity descriptions into more general propositions about the configuration of events across the year. Analyses at this level and the next also dealt with the problem of variations across instances for a given teacher and across teachers in the sample. Such variations are to be expected because any given task can be accomplished in a variety of ways.

The problem of variation was handled in this analysis by emphasizing the functions of activities as "solutions" to the tasks of maintaining order in classroom environments. This functional analysis can be illustrated with respect to the management concept of monitoring.

Monitoring can be defined as the gathering of information about events taking place in a classroom, and it can be argued that monitoring is functionally necessary for the timing of teacher interventions (see Doyle, 1980). A single act of monitoring, on the other hand, can be described in terms of the teacher's position in the room, the amount of scanning across regions of the class, and the apparent targets of the teacher's watching. Obviously monitoring can be carried out in a

variety of ways, i.e., several different acts can be functionally equivalent even though the particular features of these acts are quite dissimilar. The emphasis on management functions depicted in the narratives and the activity descriptions operated at each level of abstraction in the analysis.

Two stages were involved in transforming activity descriptions into more abstract statements about activity management. The first stage consisted of a quantitative summary of the activities that occurred during the year. This summary included information about the number and distribution of observations, the types of activities and the time devoted to each type, and the types of class sessions. Attention was also given to variations in these dimensions associated with the time of the year, such as the first month of school, the Christmas holidays, or the end of the year.

This quantitative summary, focusing on the distribution of activities over the year, furnished a general picture of the structure within which classroom management was accomplished. This picture did not, however, show much of the dynamic quality of classroom processes. The next stage of a Level 2 analysis was directed, therefore, to the description of the classroom as a moving system. Two aspects of this moving system were described: (a) the format and routines, i.e., the standard ways of doing things in the class; and (b) the strategies and maneuvers, i.e., what the teacher did to start the activity system and keep it moving in response to changing circumstances. Attention was given, in other words, to both the common patterns and the adjustments made to accommodate novel instances or events. In describing strategies and maneuvers, information concerning the misbehavior patterns of

and the management of the public arena of the classroom was provided.

In addition, consideration was given to the arrangement of events in time and to the relations among events.

Patterns described at Level 2 were considered tentative, pending a comparison with other teachers or classes at Level 3. The formulating of these patterns was necessary, however, to transform activity descriptions into more general propositions and to suggest features to look for in analyzing other cases.

Level 3: Comparative analysis. The Level 3 analysis was designed to transform Level 2 propositions about how individual teachers solved the problem of achieving and maintaining order in classrooms into more general statements about common patterns associated with managing the demands of the classroom environment. These statements were designed to provide a reasonably complete picture of the character of classroom activities and the likely consequences associated with the use of these activities in actual situations. Because success in management and in instruction is a known quality of the teachers in the sample, it was also possible to make statements about the patterns of activity management associated with teaching effectiveness.

The first part of the analysis consisted of comparisons of the two teachers selected for differential effectiveness with similar groups of students. Once all paired comparisons were finished comparisons were made across pairs within themes that began to emerge from the analysis.

Summary. For this study, then, narrative records were analyzed in three stages which moved systematically from a running account of the behavior stream to general propositions about how order was achieved in

the classes. Teachers were selected who differed on specified dimensions of management effectiveness or activity use and who worked with
known groups of students. Beginning with individual teachers, narratives for each class session were transformed into activity descriptions
and then general statements were constructed to depict the management
processes used by the teacher across the year. Comparisons were then
made between pairs of teachers and among all teachers within emerging
themes to generate propositions about common patterns of activity
management.

## Results and Discussion

For economy of presentation, this section on results has been organized around five major themes that are beginning to emerge at Levels 2 and 3 of the analysis. These themes are: (a) the effect of the junior high school class schedule on activity systems; (b) the nature of activities and their contexts; (c) activity boundaries and distinctiveness; (d) processes of getting activities started; and (e) activity management and the curriculum. Individual cases examined in this analysis will be considered insofar as they illuminate these themes.

### Activities Within Sessions

Most studies of activities have been done in elementary classes in which time is allocated in relatively large blocks and the task of segmenting these blocks into activity units is left to the teacher (see Ross, in press). In comparison, class meetings at the junior high level are short—sessions are seldom more than 55 minutes. As a result, the external structure for segmenting the school day is more prominent in governing activity systems in junior high classrooms.

In the present analysis it appeared that teachers sometimes had problems of fitting activities into the time constraints of the single class session. The most commonly occurring activities, such as seatwork and whole-class instruction, often ran from 12 to 18 minutes. The rest of the time was filled with openings and closings, transitions, and shorter segments of lecturing or seatwork. In some cases (e.g., Teacher 42) activities ran short and students had nothing to do during the last several minutes of a session. In other cases (e.g., Teacher 3), a distinct closing routine was initiated a minute or so before the end of a session or the bell for the end of the period interrupted the last activity of the day.

The problem of fitting activities into a 55-minute class session is related in part to the ability levels of the students. Evertson (1982) found, for instance, that, in comparison to average and high ability classes, there was a greater likelihood of dead time at the end of sessions. A similar pattern emerged in the present analysis: Ends of sessions were often ragged for low ability classes. This student effect makes it difficult to determine whether management success is related to a teacher's ability to "come out even" with activities. Nevertheless, there is some indication in the present analysis that the more effective managers were consistently able to fit activities to sessions, especially at the beginning of the year. In addition, more effective managers often either let the bell interrupt, the last activity (the work is then completed in class the next day or for homework) or clearly marked the closing of a session with a distinct, routine for dismissal. (More attention will be given in a subsequent section to the issue of



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distinctive versus blended segments and their probable relation to management success).

One particularly difficult segmenting problem existed in classes that were interrupted in the middle for lunch, as in the fourth priods for Teachers 22, 27, and 2. In these instances, activities had to be scheduled to fit two sessions of approximately 25 minutes. In managing such split sessions successful teachers (e.g., Teachers 2 and 27) tended to schedule an activity to run across the lunch period. That is, rather than finishing an activity before lunch and trying to start a new one after, they let lunch interrupt an activity that was then completed when students returned to class. By carrying over an activity, instructions were available to direct behavior for the start of the second half of the session. On test days, however, this was often a difficult technique to use.

Preliminary results of the present analysis suggest that considerable balancing was necessary to fit activities into the time constraints of sessions. The basic task each day was to get work started and accomplished within a relatively short period of time. If many activities were planned, then the duration of each was short and several transitions and new starts were necessary during a session. These latter events were often difficult to manage, especially in classes of low-ability students. If only one or two activities were used, then each segment was comparatively longer, and few transitions and starts were required. At the same time, long activities, especially whole-class presentations, often ended with very low involvement. As a result, sessions with few activities often ran out of work early. At times a teacher (e.g., Teacher 42) would begin with long segments and

then attempt a new start toward the end of a session. Achieving student involvement for such activities was usually very difficult.

At a conceptual level, it seems clear that in junior high classes activities are embedded in sessions. In selecting and arranging activities, therefore, a teacher must account for the time constraints and natural rhythms of individual sessions. More attention needs to be given, therefore, to how session structures affect activities and how the problem of fitting activities to sessions is solved under different circumstances.

# Activity Types and Their Contexts

Common labels for activities—lecture, seatwork, recitation, discussion—rare intended to distinguish among different arrangements of teachers and students. In the present study, however, these types seldom existed in pure form in classrooms. Although a particular pattern may have dominated, most segments were mixtures: Teachers often inserted questions in lectures or made announcements during seatwork. The greatest amount of mixing occurred during whole—class presentations of tontent and reviews of completed assignments, segments which occurred frequently (cf. Stodolsky, Ferguson, & Wimpelberg, 1981). Content was typically presented by going over a worksheet or a section of a textbook using a combination of lecture, questions (often related to information learned previously), and oral exercises or examples. Work was most often checked in class by a combination of recitation in which students supplied answers and lecture in which the teacher gave answers or expanded on a student's contribution.

In addition to the mixing of formats within segments, there were many instances in which different segments were bound together by a

thematic unity. This happened most often when a whole-class presentation served as an introduction to seatwork. Indeed, most whole-class presentations were introductions to specific seatwork assignments rather; than more broadly construed discussions of content and its meaning. (This subordination of presentations to seatwork may be a function of the relatively short length of class sessions.) As a result, "wholeclass presentation followed by seatwork" was a common sequence. In some cases, seatwork was followed, in turn, by a segment in which the assignment was reviewed and graded in a lecture or recitation format. In one of the more elaborated instances of binding, Teacher 25 began Period 2 on 8/31 (the third day of school) with an introduction to the dictionary. Students then copied words from an overhead and looked these up in their dictionaries. The final segment consisted of a brief game in which the teacher called out a word and the students raced to see who could find it in the dictionary first. In analyzing narratives it often seemed inappropriate to separate segments which were tied together in this manner. There was a clear sense that the different activities did not function independently but worked jointly as a unit to make use of session time.

The term "lesson" was introduced in a attempt to represent the sets of related activities that resulted from the binding of segments together by a theme (cf. Ross, in press). This term emphasized the content dimension which organized the separate formats. It also called attention to the possibility of an intermediate unit between the session and the activity that structures classroom events.

The nesting of activities within class sessions and lessons and the mixing of formats within segments suggests a need for caution in using

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the term "activity," at least at the junior high school level. The term can easily become an abstraction that has little relation to the structure of classroom events or the way teachers think about their task.

Certainly more work needs to be done to understand the actual configuration of activities and the way they are embedded in larger contextual units within classrooms.

# Activity Boundaries and Distinctiveness

The questions of context and internal mixing within segments point to a feature of activities that seems to be related to achieving order in classrooms. This feature is the degree to which activity types are distinct and boundaries are clearly marked. Arlin (1979) raised this issue in his analysis of transitions. He found that teachers who had identifiable transition segments, i.e., who clearly marked the endings and beginnings of activities in a sequence, had higher work involvement. The results of the present study tended to confirm Arlin's finding: Successful managers (as measured by such indicators as student engagement and the amount of inappropriate and disruptive behavior) had distinct patterns for opening and closing sessions and clearly signaled the beginning and ending of segments. In other words, they actively orchestrated classroom events. Indeed, Teacher 25 was observed on 11/15 and 1/31 to mark transitions clearly even when there was a natural blending created by self-paced segments in which students were to finish one assignment and begin another. This marking was done by interrupting when most students appeared to have finished the first assignment to collect papers and tell the class to move to the second assignment. was as if effective managers were high in situational awareness and communicated this awareness by giving a running commentary on events

taking place in the room. In addition, mixed activity types were not typically used. That is, the "program of action" within activities was often simple and predictable and activities were easier to identify and describe at Level 1 of the analysis. Less successful managers, on the other hand, often used hybrid activities, especially for introducing seatwork, and frequently blended activities together so that it was difficult to segment the behavior stream during the writing of activity descriptions at Level 1. Beginnings of sessions and of activities were often slow, and endings often drifted off into unstructured free time or talking and disruption. Indeed, there was a general looseness and lack of attention to detail in classes of less successful managers. Teacher 14, for example, was observed to lose worksheets, hand out the wrong assignment, and erase sentences that she had written earlier for an oral exercise. Other less successful managers failed to have something for the students to do at the beginning of sessions or at the end of self-paced seatwork segments. (A preliminary analysis of some beginning teachers not included in the present sample suggests that they often exhibit this looseness and fack of attention to detail.).

It is important to note that low-ability classes were often characterized by looseness of detail and a blending of segments, suggesting that there is in part a student effect on teachers in these classes. The above difference between more and less effective managers were noted, however, for teachers working with similar populations of students (e.g., Teachers 3 and 14). More attention will be given to managing low-ability classes later in this paper.

# Getting Activities Started

Most of the data used for the present analysis, were gathered during the first 3 months of the school year. Thus the data are especially useful for watching how teachers established activity systems in their classes, and major attention was given to an analysis of this aspect of achieving order in classrooms.

In classes of low ability students and less effective managers, there was a clear escalation of misbehavior (defined as low engagement and high levels of inappropriate and disruptive behavior) during the first week of the school year (see Doyle, 1979). Often the first day went fairly smoothly and students appeared reluctant to participate in class activities. After this initial hesitation, however, there was a rise in the frequency of misbehavior and an eventual stabilizing at a moderate to high level of occurrence.

This escalation of misbehavior was less noticeable in average— to high-ability classes of successful managers. The analysis of narratives suggested that at least two factors contributed to this early stabilization of order in these classes. First, successful managers tended to hover over activities and usher them along during the first weeks of school. This hovering and ushering was especially prominent during seatwork segments. Successful managers gave precise instructions for doing the work, often going over the first few items of an exercise during the introduction to seatwork. They then moved around the room checking to see whether students were doing the exercise properly and urged slower students to get started. Contacts with individual students were very brief as teacher attention was distributed widely across a class. The teachers would even give answers to students who were having trouble completing the assignment. In other words, the teacher's

presence was announced continuously and the emphasis was on getting work done. After approximately the first month of school, this hovering and ushering declined and there was a "settling in" to work routines. The teachers then were less active as organizers and conductors during seatwork segments and spent more time with individual students. Less successful managers, on the other hand, often made this shift to individualized attention prematurely and had more difficultly sustaining seatwork segments.

Second, successful managers tended to fill communication channels with information about curriculum content and assignments rather than misbehavior. This was done in part by giving a running commentary about academic work and activities. For example, during seatwork successful managers often gave private, work-related contacts a public character by talking loud enough to be heard by the entire class. They also noticed when a student was on the wrong page or was using the wrong book. Successful managers also blocked any event or incident that might interrupt the flow of an activity or break the rhythm of the class. \_-During public presentations, for example, they tended to defer interruptions caused by student questions ("We can take care of that later.") or ignore rule violations that did not disrupt the activity (e.g., gum chewing) until transitions or seatwork so that disciplinary contacts were less public. Indeed successful managers seemed very reluctant to have public confrontations over misbehavior. In classes in which the potential for misbehavior was high (i.e., students often tried to misbehave), more successful managers would often ignore minor inappropriate behavior, such as talking or calling out answers, and push on with activities even though some rules were eventually never enforced.

Less successful managers, on the other hand, often readily accepted interruptions and attended to rule violations.

Teacher 22 provides a particularly interesting case of activity management. In her Period 4 class, there was a small group of boys who frequently initiated misbehavior and ignored the teacher's reprimands. Moreover, these students joined one another quickly whenever an incident of misbehavior began. There was, in other words, a rapid "spread of effect" for inappropriate and disruptive behavior. The teacher appeared to respond to this situation by pushing ahead with activities, talking continuously about work, and hovering over seatwork segments. In addition, she ignored the misbehavior of the small core of disruptive students and reprimanded less serious offenses by students who were more likely to cooperate. In effect, she focused public attention on activities and protected that system from misbehavior by excluding the disruptive students and preventing other students from joining their ranks. And in the long run she was successful: The activity system took hold and began to run smoothly. Moreover, the original core of disruptive students eventually became involved in academic work, and ratings on indicators of management success showed improvement. In sum, the teacher was able to turn the situation around -- a rare event in teaching--although the process of getting activities started was protracted.

It seems clear from this analysis that successful managers directed public attention in classrooms to activities rather than misbehavior.

They seemed to prefer handling misbehavior privately and to maintain the rhythm or flow of class events. When faced with situations which were difficult to manage, they pushed shead with the activity system and

protected it by ignoring misbehavior and raising, their threshhold for accepting rule violations. In the cases stadied here, this approach appeared to contribute to achieving and sustaining order in classrooms.

Pushing the Curriculum

Until recently subject matter has not been a central consideration in research on teaching. Nevertheless, studies have shown that content-related variables such as opportunity to learn and curriculum pace are consistently associated with learning gains (Confrey, 1982; Good, 1982). The amount of information about content in the narratives used for the present study is limited because JHCOS observers were not instructed to attend to this dimensions. Nevertheless, it was possible to obtain a sense of how the curriculum was handled.

Curriculum became an issue in the present study because one teacher—Teacher 42—had high achievement (ranking first and fifth in gain) and low indicators of classroom order. The analysis of Teacher 42's classes indicated that she used many of the practices of less successful managers. Openings of class sessions were slow and there was a looseness around the edges of activities. Inappropriate behavior was high and the teacher seldom attended to details. Yet, the teacher appeared to push students through the curriculum. She intro- duced work and tended to ignore inappropriate behavior. In addition, she frequently graded assignments in class either by herself or in whole-class checking sessions.

A similar picture of pushing students through the curriculum was apparent in Teacher 2's low-ability class. The teacher often seemed to tolerate more inappropriate behavior than she wanted but continued to direct attention to content and accountability for work.

This combination of low management success and high achievement gain is probably likely to be unusual. A preliminary analysis of two beginning teachers not included in this study indicates that they had low achievement gain largely because they tended to abandon the curriculum in an apparent effort to maintain cooperation in activities and stop misbehavior. This question will be explored further in analyses of JHCOS teachers who were high in management indicators but low in achievement.

## Conclusion

The present analysis of the management of activities in junior high English classes provides insight into the complex processes of achieving order in a classroom. In particular, the analysis suggests that successful managers are able to:

- 1. Construct lessons that fit the externally-paced schedule of the school day;
- 2. Use activities that have a clear program of action for participants;
- 3. Explicitly mark the boundaries of activities and the transitions between activities:
- 4. Demonstrate situational awareness by attending to details and commenting on events taking place in the room:
- 5. Protect activities until they are established by actively ushering them along, focusing public attention on work, and ignoring misbehavior that disrupts the rhythm and flow of events; and
- 6. Push students through the curriculum even when misbehavior is prevalent in the class.

It is important to emphasize that these conclusions are based on a preliminary analysis of the JHCOS narrative data. To date, only a small number of comparisons among junior high English teachers has been made. Future plans call for analyses of activity management in more English classes as well as several math classes. In addition, a sample of elementary teachers from the Classroom Management Improvement Study (CMIS) will be examined to ascertain commonalities and differences across grade levels. Even at this preliminary stage, however, the project appears to provide a way of understanding management processes and specifying the procedural knowledge teachers need to be effective.

## References

- Arlin, M. Teacher transitions can disrupt time flow in classrooms.

  American Educational Research Journal, 1979, 16, 42-56.
- Barker, R. G. Ecological psychology. Stanford: Stanford University
- Burnett, J. H. Event description and analysis in the microethnography of urban classrooms. In F. A. J. Ianna and E. Storey (Eds.), Cultural relevance and educational issues: Readings in anthropology and education. Boston: Little, Brown, 1973.
- Clark, C., & Yinger, R. Teachers' thinking. In P. Peterson and H. Walberg (Eds.), Research on teaching. Berkeley: McCutchan Publishing Corporation, 1979.
- Confrey, J. Content and pedagogy in secondary schools. <u>Journal of</u>
  Teacher Education, 1982, 33(1), 13-16.
- Doyle, W. Making managerial decisions in classrooms. In D. L. Duke (Ed.), Classroom management. 78th yearbook of the National Society for the Study of Education (Part 2). Chicago: The University of Chicago Press, 1979,
- Doyle, W. Classroom management. West Lafayette, Indiana: Kappa Delta Pi, 1980.
- Doyle, W. Research on classroom contexts. <u>Journal of Teacher Education</u>, 1981, 32(6), 3-6.
  - Doyle, W. Design for analyzing classroom activities (R&D Rep. No. 6130).

    Austin: Research and Development Center for Teacher Education, The

    University of Texas at Austin, 1982.
  - Emmer, E. T., & Evertson, C. M. Synthesis of research in classroom management. Educational Leadership, 1981, 38(4), 342-347.

- Erickson, F., & Shultz, J. When is a context? Some issues and methods in the analysis of social competence. In J. L. Green and C. Wallat (Eds.), Ethnography and language in educational settings. Norwood, New Jersey.: Ablex, 1981.
- Evertson, C. Differences in instructional activities in higher- and lower-achieving junior high English and math classes. Elementary School Journal, 1982, 82, 329-350.
- Evertson, C. M., Emmer, E. T., & Clements, B. S. Report of the methodology, rationale, and instrumentation of the Junior High Classroom Organization Study (R&D Rep. No. 6100). Austin: Research and Development Center for Teacher Education, The University of Texas at Austin, 1980.
- Frake, C. O. Cultural ecology and ethnography. In A. S. Dil (Ed.),

  Language and cultural description: Essays by Charles O. Frake.

  Stanford: Stanford University Press, 1980.
- Rep. No. 9018). Austin: Research and Development Center for Teacher Education, The University of Texas at Austin, 1982.
- Gump, P. V. The classroom behavior setting: Its nature and relation to student behavior (final report). Washington, D.C.: Office of Education, Bureau of Research, 1967. (ERIC Document Reproduction No. ED015515)
- Ross, R. P. Classroom segments: The structuring of school time. In

  L. W. Anderson (Ed.), Time and school learning: Theory, research, and

  practice, in press.

- Sanford, J. P., & Evertson, C. M. Classroom management in a low SES junior high: Three case studies. Journal of Teacher Education, 1981, 32(1), 34-38.
- Shavelson, R. J., & Stern, P. Research on teachers' pedagogical thoughts, judgments, decisions, and behavior. Review of Educational Reseach, 1981, 51, 455-498.
- Stodolosky, S. S., Ferguson, T. L., & Wimpelberg, K. The recitation persists, but what does it look like? <u>Journal of Curriculum Studies</u>, 1981, 13, 121-130.
- Yinger, R. J. A study of teacher planning. Elementary School Journal, 1980, 80, 107-127.



Table 1
Achievement Data for JHCOS English Sample

Rank (Resi- dual)	Teacher (Period)	Residual	Class Level	Obs. Rating	Pre Mean	R with Residual	Rank	Post Mean	
1	T42(02)	.5586	Ħ	> <b>Ž</b>	49.30	-,41*	1 1/4 E	86.67	· ·
; · <b>ž</b> ,	T27(01)	.5337	Ë	5	50.50	.09	2	81.38	3
3	T38(04)	.3659	Ā	4	42.68	53*	, 11	79.53	5
, 4	T32(03)	.3464	À	4	36.84	16	21.	75.72	11, .
5 Š	T42(04)	.3412	L(-1+)	. 2	23.40	.00	33	64.38	25
6	T07(04)	.3106	Ā	5	39.50	.19	14	76.56	8
7	T46(01)	. 2258	Ā	2	37.74	<b></b> 18	18	74.17	<u>.</u>
8	T02(06)	.1635	Ĺ	5	24.82	.23	3 <b>2</b>	63.80	27
9	T29(06)	.1553	<b>Ā</b>	· 3	27.05	<del>-</del> .10	26	65.58	24
10	T03(06)	; <u>135</u> 5	<b>, ,</b>	5	37.33	=.31	20	69.41	20
11	T29(05)	.1206	Ā	3	27.35	40	25	67.20	22
12	T38(03)	.1046	1		75.79	.08	1	102,15	i
13	T25(02)	.0798	t	<b>5</b>	19.31	·· <b>~</b> ,50 <b>*</b>	34	55,77	3 <b>4</b>
14	T31(06)	.0613	<b>t</b>	· • •	25.78	.08	28	63:80	27
15	T03(05)	.0268	Ī	<b>5</b>	49.75	-,48*	 3	; <b>76.5</b> 0	9
		4.5		• •				•	. 0

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Rank	· · ·								$\frac{\delta}{2} = \frac{\delta}{\delta}$	
(Resi- dual)	Teacher (Period)	Residual	Class Level	Obs. Rating	Pre Mean	R with Residual	Rank	Post Mean	_Rank_ a	
16	T31(04)	.0244	Ĺ	1	25.59	18	<u></u>	61.42	32	
17	T02(04)	.0240	<b>. .</b> .	5	25.4 <u>1</u>	18	30	63.00	30	
18	T32(02)	.0164	L(-1+)	4	24.86	- <u>. 18</u>	31	63.46	29	
19	T27(04)	.0011	Å	5	46.00	<b></b> 44★	· 8	77.32	i	
20	T14(01)	0184	Ā	1	37.82	:04	17	72.40	16	
21	T07(05)	0624	Ā	5 4	43.43	22	; 10	75.28	12	
22	T05(06)	0651	Ā	5	41.84	<u>2</u> 7	12	75.76	10	
23	T22(06)	0957	Ā	3	39.00	.00	15	72,10	17	
24	T14(02)	-:0963	<b>A</b>	i	40,50	<del>-</del> .21	13	71.86	18	
25	T53(03)	0988	Ā <del>Ŧ</del>	1	48,45	.15	<u> </u>	79.90	- <u>-</u> -	
26	T25(05)	<b>1126</b>	<b>X</b> -	5	32,35	14	22	67.19	23	
27	T05( <del>05</del> )	1922	A-	5	29,57	<b>12</b>	্যু 23			
28	T22(04)	2453	A	3	37,58	28	19_		19	
29	T53(06)	2975	<b>A+</b>	1	48.62	61*	5	77.57		
30	T06(04)	3212	<b>A-</b>	4	28.75	<b>3</b> 6	24	62.94	्या. 31	
• 1	4	•		•					-	

Rank (Resi- dual)	Teacher (Period)	Residual	Class Level	Obs. Rating	Pre Mean	R with	Rank	Post Mean	Rank
31	T18(03)	-, 3456	Ä	1	45.04	<b></b> 05	9	73.29	AS
32	. T18(02)	<b>3491</b>	À	Í	39.00	.13	15	68,90	21
33	T46(02)	3844	<b>t</b> , ;	· 2	26.50	08	27	59,41	<del>.</del> 33
34	T06(05)	4588	A	4	48.23	31	7	75.04	13
		•		x	₹ 37 : 52	,	X	<b>=</b> 71.57	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;
			•	ŠD •	11.23		SI	= 8,90	• • • • • • • • • • • • • • • • • • •

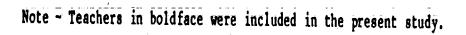


Table 2

Management Indicators for JHCOS English Sample

Rank (Resi- dual)	Teacher (Period)	Ratio of Whole-class to Seatwork	Success	Disrup-	Task Orient	Inappro- priate
<b>1</b> ·	T42(02)	.68	3.18	1.64	3.64	2.00
<b>2</b>	T27(01)	. 58	4.33	1.00	4.73	1.00
3	T38(04)	. <del>7</del> 4	3.60	1.10	4.60	1.13
4	<b>€</b> T32(03)	.60	3.80	1.30	4.60	1.33
5	T42(04)	.33	2.33	<b>3.</b> 47	2.93	4.82
6	T07(04)	.22	3.83	1.17	4.58	1.88
<b>7</b>	T46(01)	.43	3.77	1.31	4.31	2.20
8	T02(06)	.35	4.00	1.1 <del>7</del>	3.58	3.11
9	T29(06)	. <del>2</del> 7	3.36	1.82	4.36	2.25
10	T03(06)	. 34	3.79	1.21	4.71	2.38
11	T29(05)	.57	3.25	2.08	3.58	1.88
12	T38(03)-	.55	4.17	1.08	4.92	1.00
13	T25(02)	.1ē	3.67	1.73	4.47	2.20
14	T31(06)	. 70	2.75	2.58	3.17	4.33
15	T03(05)	.56	3.90	1.00	5.00	2.14
16	T31(04)	.66	3.00	3.15	2.92	4.11
17	T02(04)	.44	3.57	1.29	3.71	2.78
18	T32(02)	.65	3.82	1.55	4.55	1.38
19	T27(04)	.49	4.31	1\08	5.00	Ī.ĪĮ
20	T14(01)	.66	2.75	1.29	3.79	2.90
214	T07(05)	. 23	3.92	1.23	4.62	1.78
22	T05(06)	.36	4.27	1.75	4.75	2.00



Table 2, continued

	Rank (Resi- dual)	Teacher (Period)	Ratio of Whole-class to Seatwork		Disrup- tive	Task Orient	Inappro- priate
	23	T22(06)	.33	3.25	1.92	3.75	2:75
	24	T14(02)	.70	3.00	1.77	3.38	3.40
"و	25	T53(03)	. <b>2</b> 7	3.21	2.36	3.21	3.67
	26	T25(05)	· 17·	3.85	1.62	4.54	2.22
	27	T05(05)	.45	4.20	1.60	4.90	1.71
	28	T22(04)	.28	<b>3.1</b> 4	2.93	3.50	2.70
	29	T53(06)	.49	3, 25	2.77	2.77	4.11
	30	T06(04)	.41	4.00	1.73	, 3.73	3.38
	31	T18(03)	· ′.59	2.80	.2.53	3.60	<b>2.5</b> 5
	32	T18(02)	.56	2.92	1.92	3.50	2.44
	33	T46(02)	<b>.44</b> =	4.00	1.21	3.79	2.50
	34	T06(05)	.19	3.78	1.33	3.89	3.00
•			:	x = 3.55	1.73	4.04	2.47
			S	.520	.657	.666	.979

Note: Teachers in boldface were included in the present study.

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